

perfectly evident that he had no definite idea as to the limits of his species, and this statement is fully corroborated by the writings of both Carrington and Spruce. On this account it seems best to give up the name *reclusa* altogether and to apply to this distinct species the later name *serriflora* of Lindberg, a course already pursued by Jack and others. *C. Virginiana* is scarcely distinct from *C. serriflora* and apparently represents a luxuriant form of the species. The range of *C. serriflora* extends from Canada to the Gulf States, the species becoming more abundant southward. In New England it seems to be rare but has probably been overlooked. From other species growing on rotten logs it may be distinguished by its widely spreading and deeply bifid leaves, the acute divisions being straight or slightly connivent; by its leaf-cells with uniformly thickened walls; by its dentate or denticulate perichaetial bracts, and by its thin-walled, three-angled perianth with ciliate mouth. It varies in color from green to brown, and does not become bleached out with age. The true *C. catenulata* is not yet definitely known from North America.

(To be continued.)

JUNCUS ARISTULATUS IN NEW ENGLAND.

EUGENE P. BICKNELL.

It appears from Mr. Fernald's carefully prepared list of New England *Juncaceae* published in RHODORA 6: 34-41, that *Juncus aristulatus* Michx. is not known as a New England plant. In regard to this Mr. Fernald writes me, "I searched in vain for it in such herbaria as were accessible when I was preparing my list, for it belongs to the flora which is so characteristic of Nantucket and Martha's Vineyard, and I was surprised not to find it creeping into our borders." It should be recorded therefore that this rush does occur within these borders and, moreover, not at all as a feeble straggler but as a definite feature in the flora, reaching a very full development and fruiting prolifically. On September 18, 1899, I found it on Nantucket where it was not uncommon about one general locality somewhat east and north of the middle of the island. Specimens there collected have been forwarded to the Gray Herbarium. It may be added that

the species occurs, but in less vigorous development, at Van Cortlandt, N. Y., not very many miles from the Connecticut State line.

No practised eye which has once rested on this plant in life will hesitate to accept it as entirely distinct from *Juncus marginatus* Rostk., of which it was long supposed to be only a variety, and there is no need of here rehearsing the characters that give it individuality. But Mr. Fernald, referring particularly to the Nantucket specimens, calls my attention to a character of the species in distinction from *Juncus marginatus* which seems to have been generally overlooked. Dr. Small in his Flora of the Southeastern United States has described the larger stamens of *J. aristulatus*. Mr. Fernald observes that these larger exerted stamens with their darkened anthers are persistent and conspicuous in fruit when the small included stamens of *J. marginatus* are usually quite shrivelled and obscure. Something of this same difference in size and persistence is also seen in the styles of the two plants. In the Nantucket specimens these characters are very noticeable, but they are probably not always obvious, since I find them much less evident in certain specimens collected on Long Island.

Some interesting and rather pronounced differences between the seeds of the two plants may here be noted. As seen *en masse*, sprinkled in hundreds in the sheets where the fully matured plants have lain, those of *J. marginatus* are of a dull cinnamon-brown color, those of *J. aristulatus* being of a rather bright brownish-orange in marked contrast. Those of *J. aristulatus* are the more transparent, and though variable are mostly of a very different shape — narrowly oblong rather than oval or short oblong, instead of straight often distinctly curved, sometimes oppositely so at either end, more tapering both ways and distinctly apiculate or short-tailed, sometimes, indeed, with one tailed end fully one quarter the length of the body of the seed itself; in *J. marginatus* the seeds are mostly somewhat blunt, indistinctly apiculate on one end and not more than short apiculate on the other; they are also shorter than those of *J. aristulatus*, sometimes not more than half as long. These differences have proved to be very constant in the specimens I have been able to compare.

WOODMERE, LONG ISLAND.